

Frank Schorfheide

Professor of Economics

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ACADEMIC APPOINTMENTS

- Professor of Economics, University of Pennsylvania, since July 1, 2008
- Chair, Department of Economics, July 1, 2018 – June 30, 2021
- Associate Professor of Economics, University of Pennsylvania, 2004-2008.
- Visiting Associate Professor, New York University, Fall 2004
- Assistant Professor of Economics, University of Pennsylvania, 1998-2004.

SHORT-TERM VISITING APPOINTMENTS

- Freie Universität Berlin (Bundesbank Visiting Professorship), June 2015, 2018, 2020
- Cowles Foundation (Yale) Visiting Fellow, AY 2017/18
- Columbia University, September 2005
- University of Chicago, March 2005
- New York University, Fall 2004

AFFILIATIONS

- Centre for Economic Policy Research (CEPR), Research Fellow since August 2005
- National Bureau of Economic Research (NBER), Research Associate since 2010, Faculty Research Fellow 2006-2010; Co-Founder / Co-Leader NBER work group on “Empirical Methods and Applications for DSGE Models” (this group is part of the Economic Fluctuations and Growth research program)
- Macro Financial Modeling Working Group, Executive Committee Member 2016-2019

EDUCATION

- Yale University, Ph.D., Economics, May 1998
- Technical University of Darmstadt, Dual Master’s Degree in Economics and Electrical Engineering, August 1994
- University of Illinois, Non-degree exchange student, August 1992 – May 1993

FELLOWSHIPS, GRANTS, AND HONORS

- Econometric Society, Elected Fellow, since 2018
- International Association for Applied Econometrics, Founding Fellow, since 2018
- National Science Foundation Grant: “Piecewise Linear Approximations for DSGE Models With Occasionally-Binding Constraints: Solution, Estimation, Model Evaluation, and Applications,” with Boragan Aruoba, 2019-2022
- National Science Foundation Grant: “Monetary DSGE Models at the Zero Lower Bound: Policy Analysis and Econometric Inference,” with Boragan Aruoba, 2014-2017

FELLOWSHIPS AND HONORS (CONTINUED)

- National Science Foundation Grant: “Monetary DSGE Models: Advances in Theoretical Modelling and Econometric Analysis,” with Boragan Aruoba, 2011-2014
- National Science Foundation Grant: “Generalized Bayesian Estimation, Forecasting, and Policy Analysis in DSGE Macroeconomic Models” with Francis X. Diebold, 2006-2009
- Alfred P. Sloan Research Fellowship, 2004-2008
- University Research Foundation Award: Econometric Evaluation of Monetary Policy Rules with DSGE Models of Open Economies, 2001-2002
- University Research Foundation Award: Evaluating Asset Pricing Implications of DSGE Models, 1999-2000
- Alfred P. Sloan Dissertation Fellowship, 1996-97
- German Academic Exchange Service Dissertation Fellowship, 1994-97
- Yale University Fellowship, 1994-96 and 1997-98

PUBLICATIONS AND RESEARCH

Working Papers

- “Heterogeneity and Aggregate Fluctuations,” joint with Minsu Chang (Georgetown University), NBER Working Paper 28853, last revised May 2021.
- “Robust Forecasting,” joint with Timothy Christensen (NYU) and Hyungsik Roger Moon (USC), PIER Working Paper 20-38, last revised November 2020.
- “Real-Time Forecasting with a (Standard) Mixed-Frequency VAR During a Pandemic,” joint with Dongho Song (Johns Hopkins Carey Business School), PIER Working Paper 20-39, last revised July 2020.
- “Forecasting with a Panel Tobit Model,” joint with Laura Liu (Board of Governors) and Hyungsik Roger Moon (USC), NBER Working Paper 26569, last revised December 2019.
- “Clustering for Multi-Dimensional Heterogeneity,” joint with Xu Cheng (UPenn) and Peng Shao (UPenn), last revised November 2019.

Books

- *Bayesian Estimation of DSGE Models*, joint with Ed Herbst (Board of Governors), Princeton University Press, 2015.

Refereed Publications

- “SVARs with Occasionally-Binding Constraints,” joint with Boragan Aruoba (Maryland), Marko Mlikota (UPenn), and Sergio Villalvazo (UPenn), *Journal of Econometrics*, forthcoming.
- “Piecewise-Linear Approximations and Filtering for DSGE Models with Occasionally-Binding Constraints,” joint with Boragan Aruoba (Maryland), Pablo Cuba-Borda (Federal Reserve Board), Kenji Higa-Flores (Maryland), and Sergio Villalvazo (UPenn), *Review of Economic Dynamics*, forthcoming.
- “Online Estimation of DSGE Models,” joint with Michael Cai (Northwestern), Marco Del Negro (FRB New York), Ed Herbst (Federal Reserve Board), Ethan Matlin (FRB New York), and Reza Sarfati (FRB New York), *Econometric Journal*, 24(1), 2021, C33-58.

Refereed Publications (Continued)

- “Panel Forecasts of Country-Level Covid-19 Infections,” joint with Laura Liu (Indiana University) and Hyungsik Roger Moon (USC), *Journal of Econometrics*, 200(1), 2020, 2-22.
- “Forecasting with Dynamic Panel Data Models,” joint with Laura Liu (Indiana University) and Hyungsik Roger Moon (USC), *Econometrica*, 88(1), 2020, 171-201.
- “Tempered Particle Filtering,” joint with Ed Herbst (Board of Governors), *Journal of Econometrics*, 210(1), 2019, 26-44.
- “On the Comparison of Interval Forecasts,” joint with Ross Askanazi (Cornerstone), Frank Diebold (UPenn), and Minchul Shin (UIUC), *Journal of Time Series Analysis*, 39(6), 2018, 953-965.
- “Inference for VARs Identified with Sign Restrictions,” joint with Eleonora Granziera (Bank of Canada) and Hyungsik Roger Moon (USC), *Quantitative Economics*, 9(3), 2018, 1087-1121.
- “Identifying Long-run Risks: A Bayesian Mixed-Frequency Approach,” joint with Dongho Song (Boston College) and Amir Yaron (Wharton), *Econometrica*, 86(2), 2018, 617-654.
- “Macroeconomic Dynamics Near the ZLB: A Tale of Two Equilibria,” joint with Boragan Aruoba (Maryland) and Pablo Cuba-Borda (Board of Governors), *Review of Economic Studies*, 85(1), 2018, 87-118.
- “Assessing DSGE Model Nonlinearities,” joint with Boragan Aruoba (Maryland) and Luigi Bocola (Northwestern), *Journal of Economic Dynamics & Control*, 83, 2017, 34-54.
- “Real-Time Forecast Evaluation with Stochastic Volatility,” joint with Frank Diebold (UPenn) and Minchul Shin (UIUC), *Journal of Econometrics*, 201(2), 2017, 322-332.
- “Shrinkage Estimation of High-Dimensional Factor Models with Structural Instabilities,” joint with Xu Cheng (UPenn) and Zhipeng Liao (UCLA), *Review of Economic Studies*, 83(4), 2016, 1511-1543.
- “Dynamic Prediction Pools: An Investigation of Financial Frictions and Forecasting Performance,” joint with Marco Del Negro (FRB New York) and Raiden Hasegawa (Wharton), *Journal of Econometrics*, 192(2), 2016, 391-405.
- “Improving GDP Measurement: A Measurement Error Perspective,” joint with Boragan Aruoba (Maryland), Frank Diebold (UPenn), Jeremy Nalewaik (Federal Reserve Board), and Donho Song (Boston College), *Journal of Econometrics*, 191(2), 2016, 384-397.
- “Real-Time Forecasting with a Mixed-Frequency VAR,” joint with Dongho Song (Boston College), *Journal of Business & Economic Statistics*, 33(3), 2015, 366-380.
- “Inflation in the Great Recession and New Keynesian DSGE Models,” joint with Marco Del Negro (FRB New York) and Marc Giannoni (FRB New York), *American Economic Journal: Macroeconomics*, 7(1), 2015, 168-196.
- “Sequential Monte Carlo Sampling for DSGE Models,” joint with Ed Herbst (Board of Governors), *Journal of Applied Econometrics*, 29(7), 2014, 1073-1098.
- “A Markov-Switching Multi-Fractal Inter-Trade Duration Model, with Applications to U.S. Equities,” joint with Fei Chen (Huazhong University) and Frank Diebold (UPenn), *Journal of Econometrics*, 177(2), 2013, 320-342.
- “Labor Market Heterogeneity and the Lucas Critique,” joint with Yongsung Chang (Rochester), and Sun-Bin Kim (Yonsei University), *Journal of the European Economic Association*, 11(S1), 2013, 193-220.

Refereed Publications (Continued)

- “Methods versus Substance: Measuring the Effects of Technology Shocks,” joint with Jose Victor Rios Rull (Minnesota), Cristina Fuentes-Albero (Board of Governors), Raul Santaeulalia-Llopis (Washington University in St. Louis), and Maxym Kryhko (IMF), *Journal of Monetary Economics*, 59(8), 2012, 826-846.
- “Evaluating DSGE Model Forecasts of Comovements,” joint with Ed Herbst (Board of Governors), *Journal of Econometrics*, 171(2), 2012, 152-166.
- “Bayesian and Frequentist Inference in Partially Identified Models,” joint with Hyungsik Roger Moon (USC), *Econometrica*, 80(2), 2012, 755-782.
- “Sticky Prices versus Monetary Frictions: An Estimation of Policy Trade-offs,” joint with Boragan Aruoba (Maryland), *American Economic Journal: Macroeconomics*, 3(1), 2011, 60-90.
- “DSGE Model-Based Forecasting of Non-Modelled Variables,” joint with Keith Sill (FRB Philadelphia) and Maxym Kryshko (IMF), *International Journal of Forecasting*, 26(2), 2010, 348-373.
- “Estimation with Overidentifying Inequality Moment Conditions,” joint with Hyungsik Roger Moon, *Journal of Econometrics*, 153(2), 2009, 136-154.
- “Monetary Policy with Potentially Misspecified Models,” joint with Marco Del Negro (FRB New York), *American Economic Review*, 99(4), 2009, 1415-1450.
- “Forming Priors for DSGE Models (And How it Affects the Assessment of Nominal Rigidities),” joint with Marco Del Negro (FRB New York), *Journal of Monetary Economics*, 55(7), 2008, 1191-1208.
- “Nonstationary Hours in a DSGE Model,” joint with Yongsung Chang (Seoul National University) and Taeyong Doh (FRB Kansas City), *Journal of Money, Credit, and Banking*, 39(6), 2007, 1357-1373.
- “Bayesian Analysis of DSGE Models,” joint with Sungbae An (Singapore Management University), *Econometric Reviews*, with discussions by F. Canova, J. Geweke, D. Poirier, M. Villani, T. Zha, and rejoinder, 26(2-4), 2007, 113-172.
- “Do Central Banks Respond to Exchange Rates – A Structural Investigation,” with Thomas Lubik (FRB Richmond), *Journal of Monetary Economics*, 54(4), 2007, 1069-1087.
- “On the Fit of New Keynesian Models,” joint with Marco Del Negro (FRB New York), Frank Smets (ECB), and Raf Wouters (National Bank of Belgium), *Journal of Business & Economic Statistics*, invited JBES lecture with discussions by L. Christiano, R. Gallant, C. Sims, J. Faust, L. Kilian, and rejoinder, 25(2), 2007, 143-162.
- “Learning and Monetary Policy Shifts,” *Review of Economic Dynamics*, 8(2), 2005, 392-419.
- “VAR Forecasting under Misspecification,” *Journal of Econometrics*, 128, 2005, 99-136.
- “Testing for Indeterminacy: An Application to U.S. Monetary Policy,” with Thomas Lubik (FRB Richmond), *American Economic Review*, 94(1), 2004, 190-217.
- “Priors from General Equilibrium Models for VARs,” with Marco Del Negro (FRB New York), *International Economic Review*, 45(2), 2004, 643-673.
- “Labor Supply Shifts and Economic Fluctuations,” with Yongsung Chang (FRB Richmond), *Journal of Monetary Economics*, 50(8), 2003, 1751-1768.
- “Computing Sunspot Equilibria in Linear Rational Expectations Model,” with Thomas Lubik (FRB Richmond), *Journal of Economic Dynamics and Control*, 28(2), 2003, 273-285.
- “Minimum Distance Estimation of Non-stationary Time Series Models,” with Hyungsik Roger Moon (USC), *Econometric Theory*, 18(6), 2002, 1385-1407.

Refereed Publications (Continued)

- “Learning-by-Doing as Propagation Mechanism,” with Yongsung Chang (FRB Richmond) and Joao Gomes (UPenn), *American Economic Review*, 92(5), 2002, 1498-1520 .
- “Loss Function Based Evaluation of DSGE Models,” *Journal of Applied Econometrics*, 15(6), 2000, 645-670.
- “Quantile Spline Models for Global Temperature Change,” with Roger Koenker (University of Illinois), *Climatic Change*, 28, 1994, 395-404.

Other Publications (Book Chapters, Comments, Notes, Etc)

- “Macroeconomics – A Discussion,” in: B. Honore, A. Pakes, M. Piazzesi, and L. Samuelson (Eds.): *Advances in Economics and Econometrics: Volume 2*, Cambridge University Press, 2017, 128-142.
- “Solution and Estimation Methods for DSGE Models,” joint with Jesus Fernandez-Villaverde (UPenn) and Juan Rubio-Ramirez (Emory), in H. Uhlig and J. Taylor (eds): *Handbook of Macroeconomics Vol 2*, Elsevier, 2016, 527-724.
- “Inflation During and After the Zero Lower Bound,” joint with Boragan Aruoba (University of Maryland), *2015 Proceedings of the Jackson Hole Economic Policy Symposium*, 2016, 359-436.
- “To Hold Out or Not to Hold Out,” joint with Ken Wolpin (Rice University), *Research in Economics*, 70(2), 2016, 332-345.
- “Editors’ Introduction to Recent Advances in Methods and Applications for DSGE Models,” joint with F. Canova, and H. van Dijk, *Journal of Applied Econometrics*, 2014, 29(7), 1029-1030.
- “Estimation and Evaluation of DSGE Models: Progress and Challenges.” In: D. Acemoglu, M. Arellano, and E. Deckel (eds.): “*Advances in Economics and Econometrics: Theory and Applications, Tenth World Congress*,” Vol 3, 2013, Cambridge University Press, 184-230.
- “DSGE Model-Based Forecasting,” joint with Marco Del Negro (FRB New York). In: G. Elliott and A. Timmermann (eds.): “*Handbook of Economic Forecasting, Vol. 2A*,” Handbooks in Economics, Elsevier / North-Holland, 2013, 57-140.
- “Improving GDP Measurement: A Forecast Combination Perspective,” joint with Boragan Aruoba (Maryland), Frank Diebold (UPenn), Jeremy Nalewaik (Federal Reserve Board), and Dongho Song (UPenn). In X. Chen and N. Swanson (eds) “*Causality, Prediction, and Specification Analysis: Recent Advances and Future Directions - Essays in Honour of Halbert L. White Jr*,” Springer Verlag, 2013, 1-25.
- “On the Use of Holdout Samples for Model Selection,” joint with Ken Wolpin (Rice University), *American Economic Review - Papers and Proceedings*, 102(3), 2012, 477-481.
- “Bayesian Macroeconometrics,” joint with Marco Del Negro (FRB New York), in J. Geweke, Gary Koop, and H. van Dijk (eds) *Handbook of Bayesian Econometrics*, Oxford University Press, 2011.
- “Inflation Dynamics in a Small Open Economy Model under Inflation Targeting: Some Evidence from Chile,” joint with Marco Del Negro (FRB New York) in K. Schmidt-Hebbel and C.E. Walsh (eds.) *Monetary Policy under Uncertainty and Learning*, Series on Central Banking, Analysis, and Economic Policies, Vol 13, 2009, Central Bank of Chile, 511-562.
- “DSGE Model-Based Estimation of the New Keynesian Phillips Curve,” *Economic Quarterly of the Federal Reserve Bank of Richmond*, Fall 2008, 397-433

Other Publications (Continued)

- “Monetary Policy under Uncertainty in an Estimated Model with Labor Market Frictions” Comments on a paper by Luca Sala, Ulf Soderstrom, and Antonella Trigari. *Journal of Monetary Economics, Carnegie-Rochester Conference Series*, 55(5), 2008, 1007-1010.
- “How Structural are Structural Parameters?” Discussion of a Paper by Jesus Fernandez-Villaverde and Juan Rubio-Ramirez, *2007 NBER Macroeconomics Annual*, 2008, 139-163, MIT Press.
- “Bayesian Methods in Macroeconometrics,” in S.N. Durlauf and L.E. Blume (eds), *The New Palgrave Dictionary of Economics*, 2008, Palgrave Macmillan.
- “Testing for Indeterminacy: A Reply,” joint with Thomas Lubik (FRB Richmond), *American Economic Review*, 97(1), 2007, 530-533.
- “How Good is What You’ve Got? DSGE-VAR as a Toolkit for Evaluating DSGE Models,” joint with Marco Del Negro (FRB New York), *FRB Atlanta Economic Review*, 91(2), 2006.
- “A Bayesian Look at New Open Economy Macroeconomics,” joint with Thomas Lubik (FRB Richmond), *2005 NBER Macroeconomics Annual*, 2006, MIT Press.
- “Econometric Methods in Macroeconomics and Finance,” joint with Francis X. Diebold, Robert Engle, Carlo Favero, and Giampiero Gallo. Guest Editors’ introduction to a special issue of the *Journal of Econometrics*, 131(1-2), 2006, 1-2.
- “Policy Predictions if the Model Doesn’t Fit,” joint with Marco Del Negro (FRB New York), *Journal of the European Economic Association*, 3(2-3), 2005, 434-443.
- “Take Your Model Bowling: Forecasting with General Equilibrium Models,” joint with Marco Del Negro (FRB New York), *FRB Atlanta Economic Review*, 2003(4).
- “Loss Function Estimation of Forecasting Models: A Bayesian Perspective,” *American Statistical Association, 1999 Proceedings of the Section on Bayesian Statistics*, 1999.
- “Econometric Modeling of Macroeconomic Aggregates,” *Ph.D. Dissertation*, Yale University, Graduate School of Arts and Sciences, May 1998.
- “Economic Impact of Cuts in Defense Spending,” ACDIS Occasional Papers, April 1993, University of Illinois, Urbana and Champaign.

Book Reviews:

- “Financial Econometrics” by Christian Gourieroux and Joann Jasiak, Princeton University Press, *Econometric Theory*, 19(2), 2003, 401-409.
- “Forecasting Economic Time Series” by Michael Clements and David Hendry, Cambridge University Press, *Econometric Theory*, 16(3), 2000, 441-450.

PROFESSIONAL ACTIVITIES AND AFFILIATIONS

Editorships

- Co-Editor: *Quantitative Economics* (2011-2018), *International Economic Review* (2005-2009)
- Guest Editor: *Journal of Applied Econometrics* special issue on Methods and Applications for DSGE Models (2014).
- Associate Editor: *Macroeconomic Dynamics* (2005-2008), *Journal of Money, Credit, and Banking* (2005-2008), *American Economic Review* (2005-2011), *Journal of Econometrics* (2006-2011), *Journal of Monetary Economics* (2008-2011).
- Co-editor of a special issue of *Journal of Econometrics* on Econometric Methods in Finance and Macroeconomics, 2006

Consulting, Visiting Scholar

- Deutsche Bundesbank: June 2003, since June 2019
- Federal Reserve Bank of Philadelphia: since August 2003
- Federal Reserve Bank of New York: since Fall 2007
- Federal Reserve Bank of Chicago: July, October 2017
- Federal Reserve Bank of Kansas City: April 2015
- Federal Reserve Bank of Cleveland: July 2014, July 2016
- Federal Reserve Bank of Minneapolis: Fall 2010 – Fall 2011
- European Central Bank: April 2002, August 2003, December 2004, June 2005, December 2005, September 2007, December 2007, April 2008
- Federal Reserve Board of Governors: July 2003
- Federal Reserve Bank of Atlanta: November 2001, June 2002, August 2003, May 2005
- International Monetary Fund: 2003, 2004, 2014

Memberships in Professional Organizations

American Economic Association, Econometric Society, Int. Association for Applied Economics, Int. Society for Bayesian Analysis.

Conference Co-Organizer

- 2019 Philadelphia Fed / NBER Conference on Empirical Methods and Applications for DSGE Models
- 2019 NBER Summer Institute, Meeting of the work group on “Empirical Methods and Applications for DSGE Models”
- 2018 Chicago Fed / NBER Conference on Empirical Methods and Applications for DSGE Models
- 2018 NBER Summer Institute, Meeting of the work group on “Empirical Methods and Applications for DSGE Models”
- 2017 Philadelphia Fed / NBER Conference on Empirical Methods and Applications for DSGE Models
- 2017 NBER Summer Institute, Meeting of the work group on “Empirical Methods and Applications for DSGE Models”

Conference Co-Organizer (Continued)

- 2017 International Association of Applied Econometrics Conference (Program Committee Member)
- 2016 Chicago Fed / NBER Conference on Empirical Methods and Applications for DSGE Models
- 2016 NBER Summer Institute, Meeting of the work group on “Empirical Methods and Applications for DSGE Models”
- 2016 North American Summer Meeting of the Econometric Society (Program Committee Member)
- 2016 Seminar on Bayesian Inference in Econometrics and Statistics (SBIES), University of Pennsylvania
- 2015 Philadelphia Fed / NBER Conference on Empirical Methods and Applications for DSGE Models
- 2015 NBER Summer Institute, Meeting of the work group on “Empirical Methods and Applications for DSGE Models”
- 2015 Econometric Society World Congress (Program Committee Member)
- 2014 Chicago Fed / NBER Conference on Empirical Methods and Applications for DSGE Models
- 2014 NBER Summer Institute, Meeting of the work group on “Empirical Methods and Applications for DSGE Models”
- 2013 Philadelphia Fed / NBER Conference on Empirical Methods and Applications for DSGE Models
- 2013 NBER Summer Institute, Meeting of the work group on “Empirical Methods and Applications for DSGE Models”
- 2012 Atlanta Fed / NBER Conference on Empirical Methods and Applications for DSGE Models
- 2012 NBER Summer Institute, Meeting of the work group on “Empirical Methods and Applications for DSGE Models”
- 2011 Philadelphia Fed / NBER Conference on Empirical Methods and Applications for DSGE Models
- 2011 NBER Summer Institute, Meeting of the work group on “Empirical Methods and Applications for DSGE Models”
- 2010 Atlanta Fed / NBER Conference on Empirical Methods and Applications for DSGE Models
- 2010 NBER Summer Institute, Meeting of the work group on “Empirical Methods and Applications for DSGE Models”
- 2009 Philadelphia Fed / NBER Conference on Empirical Methods and Applications for DSGE Models
- 2009 NBER Summer Institute, Meeting of the work group on “Empirical Methods and Applications for DSGE Models”
- 2008 Cleveland Fed Conference on Empirical Methods and Applications for DSGE Models
- 2008 European Economic Association Meetings
- 2008 NBER Summer Institute, Meeting of the work group on “Empirical Methods and Applications for DSGE Models”
- 2007 Cleveland Fed Conference on Empirical Methods and Applications for DSGE Models
- 2007 NBER Summer Institute, Meeting of the work group on “Empirical Methods and Applications for DSGE Models”

Conference Co-Organizer (Continued)

- 2007 European Economic Association Meetings
- 2007 North American Econometric Society Meetings
- 2006 Cleveland Fed Conference on Empirical Methods and Applications for DSGE Models
- 2005 Cleveland Fed Conference on Empirical Methods and Applications for DSGE Models
- 2004 Cleveland Fed Conference on Empirical Methods and Applications for DSGE Models
- 2002 IGIER-PIER Conference on Econometric Methods in Macroeconomics and Finance

Seminars and Conference Presentations

- 2021: Bank of Italy, Toulouse School of Economics
- 2020: Freie Universität Berlin, FRB Philadelphia Real Time Data Analysis Conference
- 2019: Macro Financial Modeling Group Conference in New York, Bank for International Settlements, NBER Summer Institute, Econometric Society European Summer Meeting in Manchester (invited plenary speaker), Bundesbank, IWH-CIREQ-GW Macroeconomics Workshop in Halle (Germany), FRB Chicago, Notre Dame.
- 2018: AEA Meetings, Macro Financial Modeling Group Conference in New York, 7th BIS Research Network Meeting in Basel (Discussion) UCL, Bank of England, LSE, Carlton University, Freie Universität Berlin, Bundesbank, ECB Forecasting Conference, University of Virginia, Johns Hopkins, Rutgers University, Yale Conference for Peter Phillips, New York University, Princeton, Brown University.
- 2017: USC, Duke University (Statistics), MACFINROBODS Conference in Frankfurt (Keynote Speaker), Bank of Canada, FRB Richmond, Norges Bank Conference on Central Bank Modeling (Discussion), Oxford-FRBNY Monetary Economics Conference, Yale, Stanford.
- 2016: NYU Conference on Multiple Equilibria and the Financial Crisis (Discussion), Indiana University, University of Illinois at Urbana Champaign, FRB New York, Board of Governors, FRB Richmond, CEMFI, FRB Cleveland, ECB Conference on DSGE Models and Forecasting (keynote speaker), FRB Chicago / NBER DSGE Conference, University of Oxford, University of Cambridge, 8th French Econometrics Conference at ESSEC (keynote speaker), Northwestern University, University of Michigan, Michigan State University.
- 2015: New York University, Handbook of Macroeconomics Conference (Stanford), Brown University, FRB Kansas City, Econometrics Society World Congress (Discussion), University of Montreal, European Seminar on Bayesian Econometrics, City University of New York, Cornell, Bank of France.
- 2014: AEA Meetings (2 Presentations), IMF, Princeton University, EACBN-Bank of England Conference on Forecasting (London), Southern Methodist University, FRB St. Louis Econometrics Conference, Aarhus University Conference, FRB Cleveland, FRB Philadelphia Real Time Data Conference, ETH Zurich, Penn State University, Harvard-MIT, Johns Hopkins University, Bank of Portugal, ECB Conference on Nonlinearities.
- 2013: ECARES (Brussels), National Bank of Belgium, UQAM, UCSD, USC, VALE-EPGE Global Economic Conference (Rio de Janeiro), XV Annual Inflation Targeting Seminar (Banco Central do Brasil), Bank of Italy, ESoBE Conference (Oslo, Norway), FRB Philadelphia Workshop on Advances in DSGE Modeling, ECB, Bank of Poland, Board of Governors, University of Bonn.

Seminars and Conference Presentations (Continued)

- 2012: AEA Meetings (3 Presentations), European Central Bank, Goethe University, FRB Kansas City, FRB Cleveland, NBER Summer Institute, Sloan Meetings on Macro and Financial Modeling, Columbia University, Princeton Conference in Honor of Chris Sims, University of Pompeu Fabra, French Econometric Meetings in Rennes, Penn State.
- 2011: University of British Columbia, Queens University, Princeton University, Harvard-MIT, Boston University, Yale Economics Reunion Conference, Macro Workshop at Yonsei University, CIGS Conference on Macroeconomic Theory and Policy, Joint Emory and FRB Atlanta Workshop, FRB-NBER DSGE Conference, Washington University in St. Louis, University of Rochester, (EC)2 Meetings in Florence, Bank of Canada Workshop on Forecasting and Nowcasting.
- 2010: University of Maryland, Yale University, FRB Chicago, Duke University, SETA Meetings, Monetary Authority of Singapore, Pompeu Fabra, Bocconi University, NBER Summer Institute, Econometric Society World Congress, Chicago Booth, IMF, Sveriges Riksbank, European Seminar on Bayesian Econometrics in Tinbergen
- 2009: Texas A&M University, Duke University, University of Pittsburgh, UC Riverside Conference on Business Cycles, University of Iowa Conference on Bayesian Econometrics, FRB San Francisco, American Statistical Association Meeting (Invited Paper), Canadian Econometric Study Group Meeting in Ottawa (Invited Speaker), Bank of Canada, Penn Econometrics Workshop, Wharton Macro Lunch, Vanderbilt University, Northwestern University, FRB Philadelphia
- 2008: NBER-EFG Meetings (February), UC Berkeley, UCL-Northwestern Econometrics Conference on Partial Identification, New York University, FRB Kansas City, Texas Monetary Conference, FRB Philadelphia, 4th Annual DYNARE Conference at FRB Boston, Conference on Alternative Models for Monetary Policy organized by Swiss National Bank, Boston College, Johns Hopkins University, Cornell University, Board of Governors, Princeton University.
- 2007: NBER Macroeconomics Annual Conference, New York University, Northwestern University, FRB Richmond Conference on Regime Switches and Structural Change in the Macroeconomy, USC, Pompeu Fabra Conference on How Much Structure in Macro Models, CEMFI, Johns Hopkins, Carnegie-Rochester Conference.
- 2006: London School of Economics, Bank of England, Nuffield College, University of Southern California, Brown University, SBIES Conference in Iowa, Australasian Econometric Society Meetings, UT Austin, New York Area Money/Macro Conference, FRB San Francisco, UC Davis, CIREQ Time Series Conference in Montreal, EC2 Meetings in Rotterdam (invited speaker).
- 2005: University of Chicago, Conference in Honor of Chris Sims (Barcelona), NBER Macroannual Conference, FRB Atlanta, FRB Kansas City, Board of Governors, NBER Summer Institute, Duke University, Columbia University, Columbia University Conference on Quantitative Evaluation of Stabilization Policies, Cleveland Fed Conference on Empirical Methods and Applications for DSGE Models, Princeton University, Chicago Fed Conference on Price Stability
- 2004: FRB San Francisco Conference on Interest Rates and Monetary Policy (invited discussion), ASSA Meetings (San Diego), University of Montreal, FRB Richmond, NBER Summer Institute, EEA Meetings (Madrid), FRB Cleveland Conference on DSGE Models, ECB Conference on Monetary Policy and Uncertainty (Wuerzburg), New York University, Columbia University, Yale University, Stanford University, ECB

Seminars and Conference Presentations (Continued)

- 2003: Bank of England, University of Illinois, Rutgers University, New York University, FRB Philadelphia, FRB New York, Arizona State University, Penn State University, Bank of Canada Conference on Models for Monetary Policy (invited discussion), Sveriges Riksbank Conference on Small Structural Models for Monetary Policy, ECB/IMOP Workshop on Dynamic Macroeconomics, IMF, Lehigh University, Indiana University, FRB Atlanta Conference on Learning, FRB St. Louis, Bank of Canada, University of Kiel, ASSA Meetings (Washington, D.C.)
- 2002: UC Los Angeles, UC San Diego, Brown University, University of Maryland, Canadian Econometrics Study Group, University of Mannheim, European Econometric Society Meetings (Venice), CIRANO Conference on Forecasting (Montreal), ECB
- 2001: Humboldt University, FRB Atlanta, Boston College, European Econometric Society Meetings (Lausanne), Board of Governors of the Federal Reserve System, Econometrics Society Summer Meetings (Maryland), University of Illinois, University of Southern California, ISBA Regional Meeting (Laguna Beach), Midwest Macro Conference (Atlanta), Arizona State University, FRB Atlanta, ASSA Meetings (New Orleans)
- 2000: Princeton University, Econometrics Society World Congress (Seattle), NBER Summer Institute (Boston), University of Virginia, UC Irvine
- 1999: Cowles Foundation Time Series Conference (invited discussion), Rutgers University, University of Maryland, European Econometric Society Meetings (Santiago de Compostela), Joint Statistical Meetings (Baltimore)
- 1998: University of Toronto, Arizona State University, Johns Hopkins University, Cambridge University, Nuffield College, University of Pennsylvania

Invited Lectures at Large Conferences / Professional Meetings

- 2019: 27th Annual Symposium of the SNDE, keynote speaker, Dallas; 30th EC2 Conference at Oxford, keynote speaker; SURF/Bank of Finland Conference on “Post-crisis Policy Challenges and Implications for Macro Modelling”, keynote speaker.
- 2018: 5th Annual Conference of the International Association of Applied Econometrics, keynote speaker, Montreal
- 2017: Conference on Computing in Economics and Finance, Society for Computational Economics, keynote speaker, New York
- 2016: Midwest Econometrics Group Meeting, after-dinner keynote speaker, UIUC
- 2015: Jackson Hole Economic Policy Symposium, organized by FRB Kansas City
- 2015: European Seminar on Bayesian Econometrics, keynote speaker, Gerzensee
- 2013: Australasian Meetings of the Econometric Society, paired invited lecture on “Sequential Monte Carlo Sampling for DSGE Models.”
- 2012: Recent Theory and Applications of DSGE Models, invited lecturer and keynote speaker, Tinbergen Institute, Rotterdam.
- 2011: Theories and Methods in Macroeconomics in Montreal, keynote speaker. Asian Meetings of the Econometric Society, paired invited lecture on “DSGE Model-Based Forecasting”
- 2010: Econometric Society World Congress in Shanghai, paired invited lecture on “Estimation and Evaluation of DSGE Models: Progress and Challenges”

Invited Lectures at Large Conferences / Professional Meetings (Continued)

- 2007: North American Summer Meetings of the Econometric Society at Duke University, paired invited lecture on “Methods versus Substance: Measuring the Effects of Technology Shocks”
- 2006: Joint Statistical Meetings (ASA), invited JBES Lecture “On the Fit and Forecasting Performance of New Keynesian Models”

Recent Mini Courses on the Econometric Analysis of DSGE Models

- 2020: Freie Universität Berlin (May-June)
- 2019: Studienzentrum Gerzensee (June)
- 2018: Freie Universität Berlin (June)
- 2017: PIER Tools Workshop (UPenn, May), Bradley Lectures (University of Rochester, December)
- 2016: Euro Area Business Cycle Network (European University Institute Florence, June), PIER Tools Workshop (UPenn, May)
- 2015: Freie Universität Berlin (May, June), PIER Tools Workshop (UPenn, May)
- 2014: International Monetary Fund (Washington, DC, May), Aarhus University (Denmark, June), Deutsches Institut für Wirtschaftsforschung (Berlin, October)
- 2013: American Economic Association, Continuing Education (San Diego, January), Australian National University (Canberra, July), Bank of Poland (Warsaw, December)

TEACHING ACTIVITIES

Courses Taught (by Subject)

- Undergraduate Econometrics (Econ 104, formerly Econ 220 and Econ 6)
- Undergraduate Topics in Econometrics: Forecasting (Econ 221)
- Honors Thesis Course (Econ 300)
- Graduate Econometrics I (Econ 705)
- Graduate Econometrics II: Time Series (Econ 706)
- Graduate Econometrics IV: Advanced Time Series (Econ 722)

Courses Taught (by Year)

- AY 2020/21: Spring semester: Econ 706 (1), Econ 722 (1/2).
- AY 2019/20: Spring semester: Econ 706 (1/2), Econ 722 (1/2).
- AY 2018/19: Fall semester: Econ 705; Spring Semester: Econ 722 (1/2).
- AY 2017/18: on leave
- AY 2016/17: Fall semester: Econ 705 (1/2); Spring Semester: Econ 706, Econ 722 (1/2).
- AY 2015/16: Fall semester: Econ 705 (1/2); Spring Semester: Econ 722 (1/2).
- AY 2014/15: Fall semester: Econ 705 (1/2); Spring Semester: Econ 722 (1/2).
- AY 2013/14: Fall semester: Econ 705 (1/2); Spring Semester: Econ 722 (1/2), Econ 104.
- AY 2012/13: Fall semester: Econ 705 (1/2); Spring Semester: Econ 722
- AY 2011/12: Fall semester: Econ 705 (1/2); Spring Semester: Econ 722
- AY 2010/11: Spring semester: Econ 722
- AY 2009/10: Spring semester: Econ 104, Econ 722
- AY 2008/09: Fall semester: Econ 220, Econ 300; Spring semester: Econ 722, Econ 300
- AY 2007/08: Fall semester: Econ 300; Spring semester Econ 706, Econ 722, Econ 300

Dissertation Committee, Chair or Co-Chair

- Philippe Goulet Coulombe (2021); first/current appointment UQAM
- Sergio Villalvazo (2021): first/current appointment Board of Governors
- Peng Shao (2020); first/current appointment: Auburn University
- Minsu Chang (2019); first/current appointment: Georgetown University
- Paul Sangrey (2019); first/current appointment: Amazon
- Jacob Warren (2017); first/current appointment: Stevens Capital Management
- Laura Liu (2017); first appointment: Board of Governors; current appointment: Indiana University.
- Minchul Shin (2015); first appointment: University of Illinois, Urbana-Champaign; current appointment: Federal Reserve Bank of Philadelphia.
- Kotbee Shin (2015); first/current appointment: KIEP, Korea.
- Luigi Bocola (2014); first appointment: Northwestern University; current appointment: Stanford University.
- Dongho Song (2014); first appointment: Boston College; current appointment: Johns Hopkins Carey Business School.

Dissertation Committee, Chair or Co-Chair (Continued)

- Mark Bognanni (2013); first appointment: Federal Reserve Bank of Cleveland; current appointment Board of Governors.
- Han Chen (2013); first/current appointment: Board of Governors.
- Edward Herbst (2011); first/current appointment: Board of Governors.
- Cristina Fuentes-Albero (2010); first appointment: Rutgers University; current appointment: Board of Governors.
- Leonardo Melosi (2010); joint with Frank Diebold; first appointment: London Business School; current appointment: Federal Reserve Bank of Chicago.
- Maxym Kryshko (2010): first/current appointment: International Monetary Fund.
- Taeyoung Doh (2007); first/current appointment: FRB Kansas City.
- Sungbae An, (2006); first appointment: Singapore Management University; current appointment: KIEP, Korea.

Dissertation Committee, Member

Marco Airauda (2006), Boragan Aruoba (2004), Doron Avramov (2000), Gregor Baurle (2009, Universität Bern), Lorenzo Braccini (2015), Sean Campbell (2002), Fei Chen (2013), Bernd Funovits (2014, Vienna Graduate School of Economics), Roberto Gomez Cram (2019), Angelina Grant (2015, ANU), Lei Ji (2005), Paul Labys (2001), Yansong Bill Lu (2005), Hanbaek Lee (2021), Canlin Li (2002), Yang Liu (2017), Andrea Mattozzi (2004), Yasutomo Murasawa (1999), Ryo Okui (2005), Lubos Pastor (1999), Irena Pimenova (2018), Hikaru Saijo (2013), Yaye Sakho (2004), John Schindler (2000), Chiara Scotti (2005), Andreas Tryphonides (2016, EUI), Clara Vega (2002), Varang Wiriyawit (2014, ANU), Jin Ginger Wu (2005), Felipe Zanna (2003), Molin Zhong (2015), Wu Zhu (2021).

SERVICE ACTIVITIES

Department of Economics

- Department Chair, July 2018 – June 2021
- Associate Chair, July 2014 – June 2017
- Undergraduate Chair, July 2011 – June 2017
- Member of Departmental Personnel Committee, 2008-2010, since 2014
- Member of Graduate Examination Committee, 1998-2008, since 2011
- Honors Thesis Committee Chair, 2005-2009
- Junior Recruiting Committee Co-Chair, 2005-2008
- Co-organizer of departmental econometrics workshop since Fall 1998
- Graduate Admissions and Fellowships Committee, 1998-2002
- Faculty Advisor for undergraduate students majoring in economics, 1999-2000

School of Arts and Sciences

- Member of SAS Planning and Priorities Committee, since 2018
- Member of Committee on Quantitative Exploration of Evolving Systems, 2015-2017
- Member of Strategic Planning Committee for Undergraduate Teaching Committee, 2014
- Member of SAS Personnel Committee, 2008-2010, 2011-2012

School of Arts and Sciences (Continued)

- Member of the Humanities and Social Science Panel (School of Arts and Sciences), 2005-2008
- Member of the Curriculum Committee (School of Arts and Sciences), 2003-2004
- Freshmen Advisor, Fall 1999 and Spring 2000.